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STATE OF MONTANA
AIR QUALITY RULES

APRIL, 1979

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MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

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Air Quality Bureau

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16-2.14(1)-S1400 PERMITS, CONSTRUCTION AND OPERATION OF EQUIPMENT
IS HEREBY REPEALED. (History: Sec. 75-2-211, MCA; Eff. 12/31/72;
AMD, Eff. 3/7/75; REP, 1979 MAR p. 224; Eff. 3/16/79.)

16-2.14(1)-S1410 DEFINITIONS

- (1) "Animal matter" means any product or derivative of animal life.
- (2) "Control equipment" means any device or contrivance which prevents or reduces emissions.
- (3) "Control officer" means the director or the administrator, or any employee of the department designated by the administrator, or any local health officer or employee designated by the administrator.
- (4) "Existing equipment" means equipment installed prior to November 23, 1968.
- (5) "Food service establishment" means any fixed or mobile restaurant; coffee shop; cafeteria; short-order cafe; luncheonette; grill; tearoom; sandwich shop; soda fountain; tavern; bar; cocktail lounge; night club; roadside stand; private, public or nonprofit organization or institution routinely serving food; catering kitchen, commissary, or similar place in which food or drink is placed for sale or for service on the premises or elsewhere; and any other eating or drinking establishment or operation where food is served or provided for the public with or without charge.
- (6) "Fuel burning equipment" means any furnace, boiler apparatus, stack, or appurtenances thereto used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer.
- (7) "Incinerator" means any equipment, device or contrivance used for the destruction of garbage, rubbish or other wastes by burning, but not wood wastes burned in devices commonly called teepee burners, silos, truncated cones, wigwam burners or other such burners used commonly by the wood products industries and not including barrels, baskets or other contrivances commonly termed backyard trash burners, trash barrels or ash pits.
- (8) "Installation" means any property, real or personal, including, but not limited to, processing equipment, manufacturing equipment, or construction, capable of creating or causing emissions.
- (9) "Multiple chamber incinerator" means any article, machine, equipment, contrivance, structure or part of a structure used to dispose of combustible refuse by burning, consisting of three or more refractory lined combustion furnaces in series physically separated by refractory walls, interconnected by gas passage ports or ducts and employing adequate parameters necessary for maximum combustion of the material to be burned.
- (10) "New equipment" means:
 - (a) Any equipment, installation, construction, article, machine or contrivance constructed or installed after the effective date of this rule.
 - (b) Any equipment replaced or altered or processes changed in such a manner after the effective date of this rule as to have any substantial effect on the production or control of air contaminants.
 - (c) Any equipment moved after the effective date of this rule to another premise involving a change of address.
 - (d) Any equipment purchased and to be operated after the effective date of this rule by a new owner or when a new lessee desires to operate such equipment.
- (11) "Odor" means that property of an emission which stimulates the sense of smell.

(24) "Stack or chimney" means any flue, conduit or duct arranged to conduct emissions.

(25) "Standard conditions" means a temperature of 70⁰ Fahrenheit and pressure reduced to 29.92 inches of mercury at sea level.

(26) "Trade waste" means solid, liquid, or gaseous material resulting from construction or the prosecution of any business, trade or industry, or any demolition operation including, but not limited to, wood, plastics, cartons, grease, oil, chemicals and cinders.

(27) "Wood waste burners" means devices commonly called tepee burners, silos, truncated cones, wigwam burners, and other such burners commonly used by the wood products industry for the disposal of burning of wood wastes.

(28) The definitions contained in Section 75-2-103, MCA, shall be applicable where appropriate. (History: Sec. 75-2-211, MCA; Eff. 12/31/72; AMD, 1978 MAR p. 1727; Eff. 12/29/78.)

16-2.14(1)-S1415 PERMITS, CONSTRUCTION AND OPERATION OF AIR CONTAMINANT SOURCES (1) Permits required and exclusions. Except as hereafter specified, no person shall construct, install, alter or use any air contaminant source or stack associated with any source without first obtaining a permit from the Department or the Board. A permit shall not be required for the following:

- (a) Residential, institutional, and commercial fuel burning equipment of less than:
 - (i) 10,000,000 BTU/hr heat input if burning liquid or gaseous fuels, or
 - (ii) 5,000,000 BTU/hr heat input if burning solid fuel;
- (b) Residential and commercial fireplaces, barbeques and similar devices for recreational, cooking or heating use;
- (c) Motor vehicles, trains, aircraft and other such self-propelled vehicles;
- (d) Laboratory equipment used exclusively for chemical or physical analysis;
- (e) Food service establishments;
- (f) Any activity or equipment associated with the use of agricultural land or the planting, production, harvesting, or storage of agricultural crops (this exclusion does not apply to the processing of agricultural products by commercial businesses);
- (g) Ventilating systems used in buildings to house animals;
- (h) Emergency equipment installed in hospitals or other public institutions or buildings for use when the usual sources of heat, power and lighting are temporarily unobtainable;
- (i) Any activity or equipment associated with the construction, maintenance, alteration or use of roads, except for stationary sources, including but not limited to, rock crushers and asphalt plants, and roads associated with a source that is otherwise required to obtain a permit under this rule;
- (j) Agricultural and forest prescription fire activities (the adoption of this exclusion does not exempt such activities from regulation under the Open Burning Rule, ARM 16-2.14(1)-S1490); and
- (k) Drilling rig stationary engine and turbines of less than:
 - (i) 2000 HP if burning natural gas, or
 - (ii) 1000 HP if burning liquid fuels; and
- (l) All other sources and stacks not specifically excluded which have the potential to emit less than 25 tons per year of any pollutant for which a rule has been adopted in this subchapter.

(2) Definitions. For the purpose of this rule:

(a) "New or altered source or stack" means a source or stack associated with a source which has not been constructed or upon which construction has not commenced prior to the effective date of this rule. However, if the owner or operator of a source or stack has not commenced construction prior to the effective date of this rule, but the owner or operator has received a permit from the Department or the Board, then the source or stack shall not be considered a new or altered source or stack.

(b) "Existing source or stack" means a source or stack associated with a source which is in existence and operating or capable of being operated or which has a permit from the Department or the Board on the effective date of this rule.

(c) "Owner or operator" means the owner of a source or stack associated with a source or the authorized agent of the owner, or the person who is responsible for the overall operation of the source or stack.

(b) The owner or operator of an existing source for which an air quality permit is required by this rule shall apply for an air quality permit on forms available from the Department and shall be subject to signature requirements of subsection (5)(a). The information to be submitted shall include the following:

(i) Any information described in subsection (5)(b) of this rule was not submitted as a part of any previous permit application reviewed by the Department;

(ii) Any information relating to the matters described in subsection (5)(b) of this rule which has changed or is no longer applicable; and

(iii) A certification by the applicant that the source or stack is being operated in compliance with the conditions of an existing permit if one has been issued.

(c) Nothing in this subsection shall require an applicant to submit information already filed with the Department. If the applicant believes information has already been submitted to the Department, the applicant shall so indicate and, wherever possible, shall specify the date upon which the information was submitted. Any information so submitted shall be considered part of the application.

(5) Permit and application requirements for new or altered sources or stacks.

(a) The owner or operator of a new or altered source shall, not later than 180 days before construction begins, or if construction is not required not later than 120 days before installation, alteration or use begins, submit an application for an air quality permit on an application form provided by the Department. The air quality permit, if granted, shall authorize the construction and operation of the source subject to the conditions in the permit and to the requirements of this rule. The application form shall contain a certification by the person signing the application that all information contained therein is true. An unsigned or improperly signed application shall be considered incomplete. The following persons are authorized to sign an application on behalf of the owner or operator of a new or altered source or stack:

(i) An application submitted by a corporation must be signed by a principal executive officer of at least the level of vice president, or his authorized representative, if that representative is responsible for the overall operation of the source or stack;

(ii) An application submitted by a partnership or a sole proprietorship must be signed by a general partner or the proprietor respectively;

(iii) An application submitted by a municipal, state, federal or other public agency shall be signed by either a principal executive officer, appropriate elected official or other duly authorized employee; and

(iv) An application submitted by an individual must be signed by the individual or his authorized agent.

(b) The application for an air quality permit to construct a new or altered source or stack shall include the following.

(i) A map and diagram showing the location of the proposed new or altered source and each stack associated with the source, the property involved, the height and outline of the buildings associated with the new or altered source, and the height and outline of each stack associated with the new or altered source;

(ii) A description of the new or altered source including data on expected production capacity, raw materials and major equipment components;

(iii) A description of the control equipment to be installed;

(iv) A description of the composition, volume and temperatures of the effluent stream, including the nature and extent of air contaminants emitted, quantities and means of disposal of collected contaminants, and the air quality relationship of these factors to conditions created by

(iii) After making a preliminary determination, the Department shall notify those members of the public who requested such notification subsequent to the notice required by subsection (6)(b)(i) and the applicant of the Department's preliminary determination. The notice shall specify that comments may be submitted on the information submitted by the applicant and the Department's preliminary determination to issue, issue with conditions or deny the permit. The notice shall also specify the following:

(A) Where a complete copy of the application and the Department's analysis of the applicant can be reviewed. One copy of this material shall be made available for inspection by the public in the air quality control region where the source or stack is located.

(B) A date by which all comments on the Department's preliminary determination must be submitted in writing within fifteen (15) days after notice is mailed.

(C) Notwithstanding the opportunity for public comment, a final decision must be made within sixty (60) days after a completed and filed application is submitted to the Department as required by Section 75-2-211, MCA. The notice shall specify the date upon which the sixty (60) day period expires, the person from whom a copy of the final decision may be obtained, and the procedure for requesting a hearing before the Board concerning the Department's decision.

(c) If a prevention of significant deterioration (PSD) rule has been adopted by the Board the following additional review requirements shall apply to any source or stack which is subject to the PSD rule:

(i) The Department shall advertise in a newspaper of general circulation in the air quality control region affected by the proposed source or stack that an application has been received, the preliminary determination made by the Department, the degree of increment consumption that is expected from the source or stack, how written comments may be submitted, and how the final determination of the Department may be appealed to the Board; and

(ii) The Department shall send a copy of the notice of public comment to the applicant, the Region VIII Administrator of the Environmental Protection Agency and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: any other state or local air pollution control agencies, the governing body of the city and county where the source or stack would be located; any comprehensive regional land use planning agency, and any state, federal land manager, or Indian governing body whose lands may be affected by emissions from the source or stack.

(7) Conditions under which permits may be issued.

(a) Any permit issued under the provisions of this rule may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards.

(b) An air quality permit to construct shall not be issued to a new or altered source, except as provided in subsection (7)(e) unless the applicant demonstrates that the source or stack can be expected to operate in compliance with the standards and rules adopted under the Montana Clean Air Act and the applicable regulations and requirements of the Federal Clean Air Act.

(c) A new or altered source shall not commence operation, except as provided in subsection (7)(e), unless the information submitted by the applicant demonstrates that construction has occurred in compliance with the permit and that the source can operate in compliance with applicable rules and standards of the permit.

(d) An air quality permit shall be issued to an existing source unless the Department demonstrates that the source does not operate in compliance with applicable rules or standards or an existing permit granted by the Board or Department.

emissions from a source or stack will be increased as a result of the changed operations.

(c) The Department shall notify the permittee in writing of any proposed modifications of the permit. Service of the Department's intention to modify shall be made as provided in subsection (8)(a) of this rule. The permit shall be deemed modified in accordance with the notice within fifteen (15) days after service of the notice unless the permittee requests a hearing before the Board. The hearing and judicial review of the Board's decision shall be governed by the Montana Administrative Procedure Act. The filing of a request for a hearing postpones the effective date of the modifications to the permit until the decision of the Board becomes final or judicial review has been concluded.

(12) Waivers. The Department may, as specified in Section 75-2-211, MCA:

(a) Waive the requirements for submittal of information required in an application; and

(b) Waive or shorten the time required for the submission of an application.

(13) Transfer of air quality permits. After approval by the Department, an air quality permit may be transferred from one location to another or from one person to another.

(14) General provisions.

(a) Air quality permits shall be made available for inspection by the Department at the location of the source or stack for which the permit has been issued.

(b) Nothing in this rule shall be construed as relieving any permittee of the responsibility for complying with any applicable Federal or Montana statute, rule or standard except as specifically provided in this rule.

(History: Sec. 75-2-111, 75-2-204, MCA; NEW, 1979 MAR p. 224; Eff. 3/16/79)

16-2.14(1)-S1418 PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY

(1) Definitions. For the purposes of this rule, the following definitions are applicable:

(a) "Airborne particulate matter" means any particulate matter discharged into the outdoor atmosphere which is not discharged from a normal exit of a stack or chimney for which a source test can be performed in accordance with Method 5. Determination of Particulate Emissions from Stationary Sources, Appendix A, Part 60.275 (Test Methods and Procedures, Title 40, Code of Federal Regulations, Revised, July 1, 1977).

(b) "Allowable emissions" means the emission rate calculated using the maximum rated capacity of the source (unless the source is subject to enforceable permit conditions which limit the operating rate or hours of operation, or both) and the most stringent of the following:

(i) Applicable standards as set forth in 40 CFR Part 60 and Part 61,

(ii) The applicable state emission limitation, or

(iii) The emission rate specified as a permit condition.

(c) "Applicable ambient air quality standard" means the concentration permitted under:

(i) the national secondary ambient air quality standards, or

(ii) the national primary ambient air quality standards.

(d) "Baseline concentration" means that ambient concentration level reflecting actual air quality as of August 7, 1977, minus any contribution from major stationary sources and major modifications on which construction commenced on or after January 6, 1975. The baseline concentration shall include contributions from:

(i) The actual emissions of other sources in existence on August 7, 1977, except that contributions from facilities within such existing sources for which a plan revision proposing less restrictive requirements was submitted on or before August 7, 1977, and was pending action by the Administrator of EPA on that date shall be determined from the allowable emissions of such facilities under the plan as revised; and

(ii) The allowable emissions of major stationary sources and major modifications which commenced construction before January 6, 1975, but were not in operation by August 7, 1977.

(e) "Best available control technology" means an emission limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the Federal Clean Air Act as amended ("the Act") which would be emitted from any proposed major stationary source or major modification which the Department, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other cost determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such contaminant. In no event shall application of the best available control technology result in emission of any contaminant which would exceed the emissions allowed by any applicable standard under 40 CFR Part 60 and Part 61. If the Department determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, it may instead prescribe a design, equipment, work practice or operational standard or combination thereof, to require the application of best available control technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice or operation and shall provide for compliance by means which achieve equivalent results.

heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants; and

(ii) Notwithstanding the source sizes specified in subsection (1) (n) (i) of this rule, any source which emits, or has the potential to emit, 250 tons per year of more of any air contaminant regulated under the Act.

(o) "Necessary preconstruction approvals or permits" means those permits or approvals required under Federal and Montana air quality control laws and regulation.

(p) "Potential to emit" means the capability at maximum capacity to emit a contaminant in the absence of air pollution control equipment. "Air pollution control equipment" includes control equipment which is not, aside from air pollution control laws and regulation, vital to production of the normal product of the source or to its normal operation. Annual potential shall be based on the maximum annual rated capacity of the source, unless the source is subject to enforceable permit conditions which limit the annual hours of operation. Enforceable permit conditions on the type or amount of materials combusted or processed may be used in determining the potential emission rate of a source.

(q) "Reconstruction" will be presumed to have taken place where the fixed capital cost of the new components exceed fifty percent of the fixed capital cost of a comparable entirely new facility or source. However, any final decision as to whether reconstruction has occurred shall be made in accordance with the provision of 40 CFR 60.15(f)(1)-(3). A reconstructed source will be treated as a new source for purposes of this section, except that use of an alternative fuel or raw material by reason of an order in effect under Section 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation), by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act, or by reason of an order or rule under Section 125 of the Act shall not be considered reconstruction. In determining best available control technology for a reconstructed source, the provisions of 40 CFR 60.15(f)(4) shall be taken into account in assessing whether a standard of performance under 40 CFR Part 60 is applicable to such source.

(r) "Source" means any structure, building, facility, equipment, installation or operation (or combination thereof) which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or by persons under common control) which causes or may cause the emission of one or more air contaminants.

(s) "Temporary" means less than two (2) years.

(2) Ambient air increments. In areas designated as Class I, II, or III, increases in contaminant concentration over the baseline concentration, as determined by the cumulative results of air quality modeling of major stationary sources or major modifications, shall be

(5) Exclusions from increment consumption;

(a) The Department shall exclude the following concentrations in determining compliance with a maximum allowable increase:

(i) Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) over the emissions from such sources before the effective date of such an order;

(ii) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act over the emissions from such sources before the effective date of such plan; and

(iii) Concentrations of particulate matter attributable to the increase in emissions from construction or temporary emission-related activities.

(b) The Governor may direct the Department to exclude in determining compliance with a maximum allowable increase any increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration.

(c) In reference to subsection (5)(a) the following shall also apply:

(i) No exclusion of such concentrations shall apply more than five years after the effective date of the order to which subsection (5)(a)

(i) refers or the plan to which subsection (5)(a)(ii) refers, whichever is applicable.

(ii) If both such order and plan are applicable, no such exclusion shall apply more than five years after the later of such effective dates.

(6) Redesignation.

(a) All areas of Montana (except as otherwise provided under (4) of this rule) are designated Class II. Any designation shall be subject to the redesignation procedures of this subsection.

(b) A redesignation may be requested by the Department or by a municipality, county, or other general unit of local government on being petitioned by fifteen percent (15%) of the qualified electors residing within the jurisdiction of the local government unit. The area to be redesignated shall lie within the external boundaries of the local government unit, which shall be the petitioning unit. The petition signed by fifteen percent of the qualified electors shall include:

(i) A legal description of the boundary of the area proposed to be redesignated;

(ii) An explanation of the purpose of the petition and redesignation; and

(iii) A statement to the effect that those persons signing the petition desire the described area to be redesignated to either Class I, Class II, or Class III and such statement shall specify which class.

(c) Requests for redesignation, other than those applicable to areas within the exterior boundaries of a reservation of a federally recognized Indian tribe, shall be submitted to the Department on application forms available from the Department. The redesignation application shall contain a written statement of reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation. Upon receipt of an application, the Department may request additional information necessary for review from the applicant. The

source applicability and general exemptions.

(a) No major stationary source or major modifications commencing construction after the effective date of this rule shall be constructed unless, as a minimum, requirements contained in the subparagraphs of subsections (9), (11), (13), and (15) of this rule have been met. Such requirements shall apply to a proposed source or modification only with respect to those contaminants for which the proposed construction would be a major stationary source or major modification.

(b) The requirements contained in the subparagraphs of subsections (9), (11), (13) and (15) of this rule shall not apply to a major stationary source or major modification with respect to a particular contaminant if the owner or operator demonstrates to the Department that:

(i) As to that contaminant, the source or modification is subject to the emission offset ruling (41 FR 55524) as it may be amended or to regulations approved or promulgated pursuant to Section 173 of the Act and

(ii) The source or modification would impact no area attaining the national ambient air quality standards (either internal or external to areas designated as nonattainment under Section 107 of the Act).

(c) The Department may permit a portable facility which has received construction approval under requirements contained in the subparagraphs of subsections (9), (11), (13), (15), and (16) to relocate without being subject to such requirements if:

(i) Emissions from the facility would not exceed allowable emission; and

(ii) Such relocation would impact no Class I area and no area where an applicable increment is known to be violated or would be violated due to the relocation of the facility; and

(iii) Notice is given to the Department at least thirty days prior to such relocation identifying the proposed new location and the probable duration of operation at such location.

(9) Control technology review.

(a) A major stationary source or major modification shall meet all applicable requirements of the Montana Clean Air Act and rules promulgated pursuant thereto and all applicable emission standards and standards of performance under 40 CFR Part 60 and Part 61.

(b) A major stationary source or major modification shall apply best available control technology for each applicable contaminant, unless the increase in allowable emissions of that contaminant from the source would be less than 50 tons per year, 1,000 pounds per day, or 100 pounds per hour, whichever is most restrictive.

(i) The preceding hourly or daily rates shall apply only with respect to a contaminant for which an increment, or national ambient air quality standard, for a period less than 24 hours or period of 24 hours, as appropriate, has been established.

(ii) In determining whether and to what extent a modification would increase allowable emissions, there shall be taken into account no emission reductions achieved elsewhere at the source at which the modification would occur.

(c) In the case of a modification, the requirement for best available control technology shall apply only to each new or modified facility which would increase the allowable emissions of an applicable contaminant.

(d) Where a facility within a source would be modified but not reconstructed, the requirement for best available control technology shall not apply if no net increase in emissions of an applicable contaminant would occur at the source, taking into account all emission increases and decreases at the source which would accompany the modification,

public comment procedures developed in accordance with subsection (6) (b) and (c) of ARM 16-2.14(1)-SI415 (permit rule).

(d) Written approval of the Administrator of EPA must be obtained for any modification or substitution.

(e) Methods like those outlined in the Workbook for the Comparison of Air Quality Models (U. S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, April 1977) should be used to determine the comparability of air quality models.

(f) The Guidelines on Air Quality Models is incorporated by reference. On April 27, 1978, the Office of the Federal Register approved this document for incorporation by reference. A copy of the guideline is on file with the Department and in the Federal Register library.

(g) The documents referred to in this paragraph are available for public inspection at EPA's Public Information Reference Unit, Room 2922, 401 M Street SW, Washington, D.C. 20460, and at the libraries of each of the ten EPA Regional Offices. Copies are available as supplies permit from the Library Service Office (MD-35), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711. Also, copies may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, Va. 22161.

(13) Monitoring.

(a) The owner or operator of a proposed source or modification shall, after construction of the source or modification, conduct such ambient air quality monitoring and reporting as the Department determines may be necessary to establish the effect which emissions from the source or modification of a contaminant for which ambient air quality standard exists (other than non-methane hydrocarbons) may have, or is having, on air quality in any area which such emissions would affect.

(b) As necessary to determine whether emissions from the proposed source or modification would cause or contribute to a violation of an applicable ambient air quality standard, any permit application submitted after August 7, 1978, shall include an analysis of continuous air quality monitoring data for any contaminant emitted by the source or modification for which an applicable ambient air quality standard exists except non-methane hydrocarbons. Such data shall relate to, and shall have been gathered over, the year preceding receipt of the complete application, unless the owner or operator demonstrates to the Department's satisfaction that such data gathered over a portion or portions of that year or another representative year would be adequate to determine that the source or modification would not cause or contribute to a violation of an applicable ambient air quality standard.

(14) Source information.

(a) The owner or operator of a proposed source or modification shall submit to the Department all information necessary to perform any analysis or make any determination required under this rule.

(b) Such information shall include:

(i) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(ii) A detailed schedule for construction of the source or modification;

(iii) A detailed description as to what system of continuous emission reduction is planned by the source or modification, emission estimates, and any other information as necessary to determine that best available control technology as applicable would be applied;

(c) The Department may request the owner or operator to provide information on:

16-2.14(1)-S1420 INCINERATORS (1) No incinerator shall be used for the burning of refuse unless such incinerator is a multiple chamber incinerator or one of other design of equal effectiveness approved by the department prior to installation or use.

(2) No person shall cause or authorize to be discharged into the outdoor atmosphere from any incinerator, particulate matter in excess of 0.10 grains per standard cubic foot of dry flue gas, adjusted to twelve percent (12%) carbon dioxide and calculated as if no auxiliary fuel had been used.

(3) No person shall cause or authorize to be discharged into the outdoor atmosphere from any incinerator emissions which exhibit an opacity of ten percent (10%) or greater averaged over six (6) consecutive minutes.

(4) The department may, for purposes of evaluating compliance with this rule, direct that no person shall operate or cause or authorize the operation of any incinerator at any time other than between the hours of 8:00 a.m. and 5:00 p.m. At those times when the operation of incinerators is prohibited by the department, the owner or operator of the incinerator shall store the refuse in a manner that will not create a fire hazard or arrange for the removal and disposal of the refuse in a manner consistent with ARM 16-2.14(8)-S14315, Solid Waste Management.

(5) The provisions of this rule are applicable to performance tests for determining emissions of particulate matter from incinerators. All performance tests shall be conducted while the affected facility is operating at or above the maximum refuse charging rate at which such facility will be operated and the refuse burned shall be representative of normal operation and under such other relevant conditions as the department shall specify based on representative performance of the affected facility. Test methods set forth in Title 40, Part 60, Code of Federal Regulations, or equivalent methods approved by the department shall be used. (History: Sec. 75-2-203, MCA; Eff. 12/31/72; AMD, Eff. 9/5/75; AMD, 1978 MAR p. 1731; Eff. 12/29/78.)

16-2.14(1)-S1430 PARTICULATE MATTER, INDUSTRIAL PROCESSES (1) No person shall cause, suffer, allow, or permit to be discharged into the outdoor atmosphere from any operation, process or activity, particulate matter in excess of the amount shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by interpolation.

When the process weight exceeds 60,000 pounds per hour, the maximum allowable weight discharged per hour will be determined by use of the following equation:

$$E = 55.0 P^{0.11-40}$$

Where E = maximum rate of emission in pounds per hour,
P = process weight rate in tons per hour.

Process Weight Rate		Rate of Emission
lb/hr	Tons/hr	lb/hr
100	0.05	0.551
200	0.10	0.877
400	0.20	1.40
600	0.30	1.83
800	0.40	2.22
1,000	0.50	2.58
1,500	0.75	3.38
2,000	1.00	4.10
2,500	1.25	4.76
3,000	1.50	5.38
3,500	1.75	5.96
4,000	2.00	6.52
5,000	2.50	7.58
6,000	3.00	8.56
7,000	3.50	9.49
8,000	4.00	10.4
9,000	4.50	11.2
10,000	5.00	12.0
12,000	6.00	13.6
16,000	8.00	16.5
18,000	9.00	17.9
20,000	10.00	19.2
30,000	15.00	25.2
40,000	20.00	30.5
50,000	25.00	35.4
60,000	30.00	40.0
70,000	35.00	41.3
80,000	40.00	42.5
90,000	45.00	43.6
100,000	50.00	44.6
120,000	60.00	46.3
140,000	70.00	47.8
160,000	80.00	49.0
200,000	100.00	51.2
1,000,000	500.00	69.0
2,000,000	1,000.00	77.6
6,000,000	3,000.00	92.7

Interpolation of the data in this table for process weight

16-2.14(1)-S1440 PARTICULATE MATTER, AIRBORNE

(1) No person shall cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of airborne particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20 percent or greater averaged over six consecutive minutes, except for emission of airborne particulate matter originating from any transfer ladle or operation engaged in the transfer of molten metal which was installed or operating prior to November 23, 1968.

(2) No person shall cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

(3) No person shall operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne particulate matter. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20 percent or greater averaged over six consecutive minutes.

(4) Within any area designated non-attainment for either the primary or secondary national ambient air quality standards (NAAQS) for total suspended particulate (TSP), any person who owns or operates:

(a) any existing source of airborne particulate matter shall apply reasonably available control technology (RACT);

(b) any new source of airborne particulate matter that has a potential to emit less than 100 tons per year of particulates shall apply best available control technology (BACT);

(c) any new source of airborne particulate matter that has a potential to emit more than 100 tons per year of particulates shall apply lowest achievable emission rate (LAER).

(5) The provisions of this rule shall not apply to emissions of airborne particulate matter originating from any activity or equipment associated with the use of agricultural land or the planting, production, harvesting, or storage of agricultural crops (this exemption does not apply to the processing of agricultural products by a commercial business).

(6) Definitions. For purposes of this rule, the following definitions apply:

(a) "Airborne particulate matter" means any particulate matter discharged into the outdoor atmosphere which is not discharged from the normal exit of a stack or chimney for which a source test can be performed in accordance with Method 5 (determination of particulate emissions from stationary sources), Appendix A, Part 60.275 (Test Method and Procedures), Title 40, Code of Federal Regulations (Revised July 1, 1977).

(b) "Reasonable precautions" means any reasonable measure to control emissions of airborne particulate matter. Determination of what is reasonable shall be accomplished on a case-by-case basis taking into account energy, environmental, economic, and other cost.

(c) "Reasonably available control technology (RACT)" means a limitation of emissions from any source that is determined on a case-by-case basis to be reasonably available, taking into account energy, environmental, and economic impacts and other costs. Such an emission limitation shall only be required after consideration of the necessity of imposing such a limitation in order to attain and maintain a national ambient air quality standard (NAAQS) and alternative means of providing for attainment and maintenance of such a NAAQS.

(d) "Best available control technology (BACT)" means an emission limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the

16-2.14(1)-S1450 PARTICULATE MATTER, FUEL BURNING EQUIPMENT

(1) No person shall cause, suffer, allow or permit particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the atmosphere in excess of the hourly rate set forth in the following table:

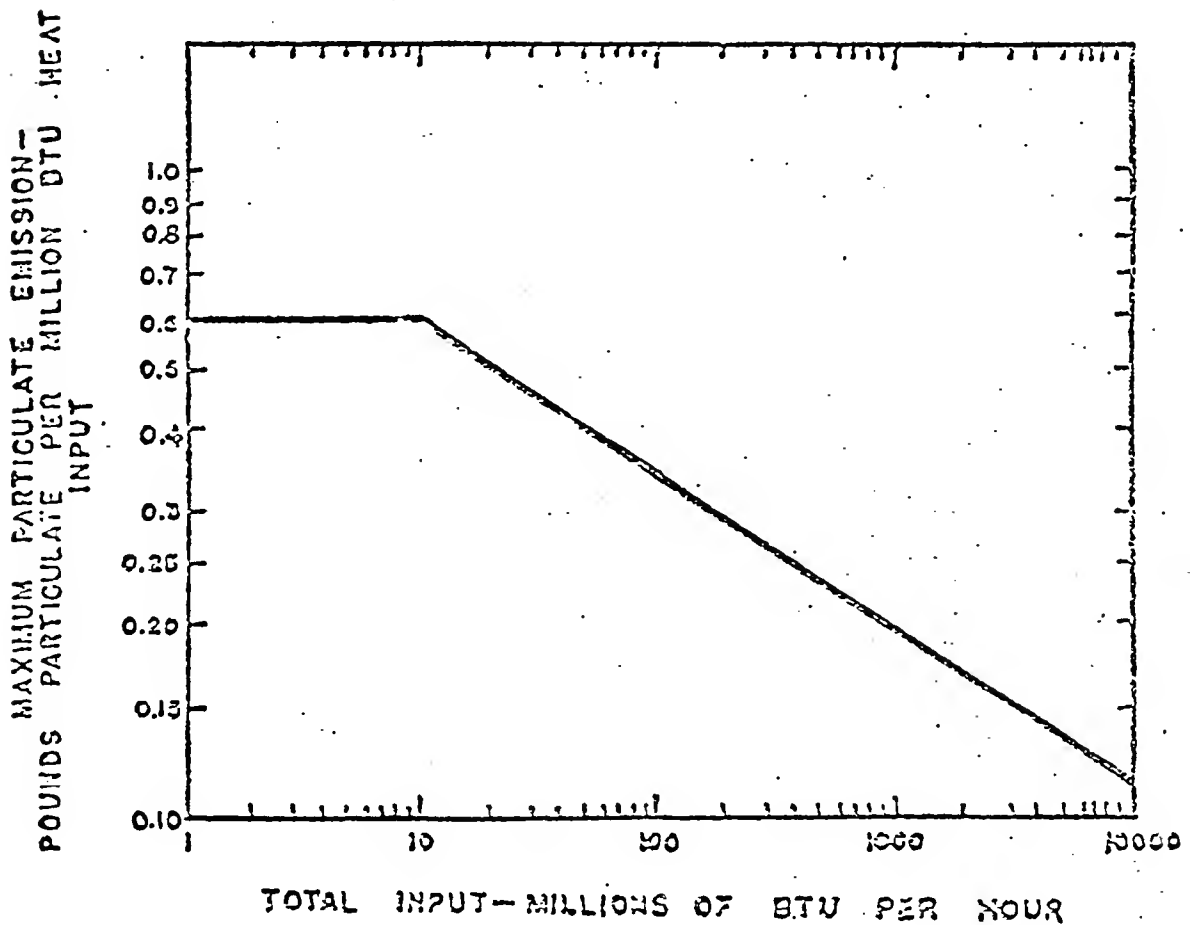
Heat Input in Million British Thermal Units per Hour	Maximum Allowable Emissions of Particulate Matter in lbs. per million British Thermal Units	
	Existing Fuel Burning Equipment	New Fuel Burning Equipment
Up to and including 10	0.60	0.60
100	0.40	0.35
1,000	0.28	0.20
10,000 and above	0.19	0.12

(2) For a heat input between any two consecutive heat inputs stated in the preceding table, maximum allowable emissions of particulate matter are shown for existing fuel burning equipment on Figure 1 and for new fuel burning equipment on Figure 2. For the purposes hereof, heat input shall be calculated as the aggregate heat content of all fuels (using the upper limit of their range of heating value) whose products of combustion pass through the stack or chimney.

When two or more fuel burning units are connected to a single stack, the combined heat input of all units connected to the stack shall not exceed that allowable for the same unit connected to a single stack. (History: Sec. 75-2-203, MCA; Eff. 12/31/72.)

FIGURE 2

MAXIMUM EMISSION OF PARTICULATE MATTER
FROM NEW FUEL BURNING INSTALLATIONS



16-2.14(1)-S1460 VISIBLE AIR CONTAMINANTS, RESTRICTIONS

(1) No person shall cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, which exhibit an opacity of forty percent (40%) or greater averaged over six (6) consecutive minutes. The provisions of this section shall not apply to transfer of molten metals or emissions from transfer ladles.

(2) No person shall cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, which exhibits an opacity of twenty percent (20%) or greater averaged over six (6) consecutive minutes.

(3) During the building of new fires, cleaning of grates, or soot blowing, the provisions of sections (1) and (2) shall apply, except that a maximum average opacity of sixty percent (60%) shall be permissible for not more than one (1) four-minute period in any sixty (60) consecutive minutes. Such a four-minute period shall mean any four (4) consecutive minutes.

(4) This rule shall not apply to emissions from:

- (a) Wood-waste burners,
- (b) Incinerators,
- (c) Motor vehicles,

(d) Those new stationary sources listed in ARM 16-2.14(1)-S14082 for which a visible emission standard has been promulgated. (History: Sec. 75-2-203, MCA; Eff. 12/31/72; AMD, 1978 MAR p. 1727; Eff. 12/29/78.)

16-2.14(1)-S1470 SULFUR OXIDE EMISSIONS

(1) Regulation of Sulfur in Fuel.

(a) Commencing July 1, 1970, no person shall burn liquid or solid fuels containing sulfur in excess of two pounds of sulfur per million Btu fired.

(b) Commencing July 1, 1971, no person shall burn liquid or solid fuels containing sulfur in excess of 1.5 pounds of sulfur per million Btu fired.

(c) Commencing July 1, 1972, no person shall burn liquid or solid fuels containing sulfur in excess of one pound of sulfur per million Btu fired.

(d) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions. The provisions of section (d) shall not apply to:

(i) The burning of sulfur, hydrogen sulfide, acid sludge or other sulfur compounds in the manufacturing of sulfur or sulfur compounds.

(ii) The incinerating of waste gases provided that the gross heating value of such gases is less than 300 Btu's per cubic foot at standard conditions and the fuel used to incinerate such waste gases does not contain sulfur or sulfur compounds in excess of the amount specified in this rule.

(iii) The use of fuels where the gaseous products of combustion are used as raw materials for other processes.

(iv) Small refineries (under 10,000 barrels per day crude oil charge) provided that they meet other provisions of this rule.

(e) Exceptions:

(i) A permit may be granted by the director to burn fuels containing sulfur in excess of the sulfur contents indicated in section (1) provided it can be shown that the facility burning the fuel is fired at a rate of one million Btu per hour or less.

(ii) For purpose of section (1), a higher sulfur-containing fuel may, upon application to the director, be utilized in subsections (a), (b), or (c) if such fuel is mixed with one or more lower sulfur-containing fuels which results in a mixture, the equivalent sulfur content of which is not in excess of the stated values when fired.

(iii) The requirements of subsections (a), (b) or (c) of section (1) shall also be deemed to have been satisfied if, upon application to the director, a sulfur dioxide control process is applied to remove the sulfur dioxide from the gases emitted by burning of fuel of any sulfur content which results in an emission of sulfur in pounds per hour not in excess of the pounds per hour of sulfur that would have been emitted by burning fuel of the sulfur content indicated without such a cleaning device.

(f) Definition:

"Btu" means British thermal unit which is the heat required to raise the temperature of one pound of water through one Fahrenheit degree.

(2) Primary Non-Ferrous Smelters.

(a) No person or persons shall cause, suffer, allow or permit to be discharged into the outdoor atmosphere from any copper, zinc or lead smelting operation or any slag treatment plant reduced sulfur in excess of the amount shown in the following table:

(c) Monitoring and Reporting:

(i) Every Kraft mill in the state shall install equipment for the continual monitoring of TRS.

(ii) The monitoring equipment shall be capable of determining compliance with these standards and shall be capable of continual sampling and recording of the concentrations of TRS contaminants during a time interval not greater than 30 minutes.

(iii) The sources monitored shall include, but are not limited to, the recovery furnace stacks and the lime kiln stacks.

(iv) Each mill shall sample the recovery furnace, lime kiln, and smelt tank for particulate emissions on a regularly scheduled basis in accordance with its approved sampling program.

(v) Each mill shall submit within 60 days after the effective date of this regulation a detailed monitoring program and time schedule for approval by the director. The equipment shall be ordered within 30 days after the monitoring program has been approved in writing by the director. The equipment shall be placed in effective operation in accordance with approved program within 60 days after delivery.

(vi) Unless otherwise authorized by the director, data shall be reported by each mill at the end of each calendar month as follows:

(aa) Daily average emission of TRS gases expressed in pounds of sulfur per 1,000 pounds of black liquor fired for each source included in the approved monitoring program.

(ab) The number of hours each day that the emission of TRS gases from each recovery furnace stack exceeds 17.5 parts per million dry and the maximum concentration of TRS measured each day.

(ac) Emission of TRS gases in pounds of sulfur per 1,000 pounds of black liquor fired in the Kraft recovery furnace on a monthly basis and pounds of sulfur per hour for the other sources included in the approved monitoring program. Emission of particulates in pounds per hour based upon a sampling conducted in accordance with the approved monitoring program.

(ad) Average daily Kraft pulp production in air-dried tons and average daily black liquor burning rate.

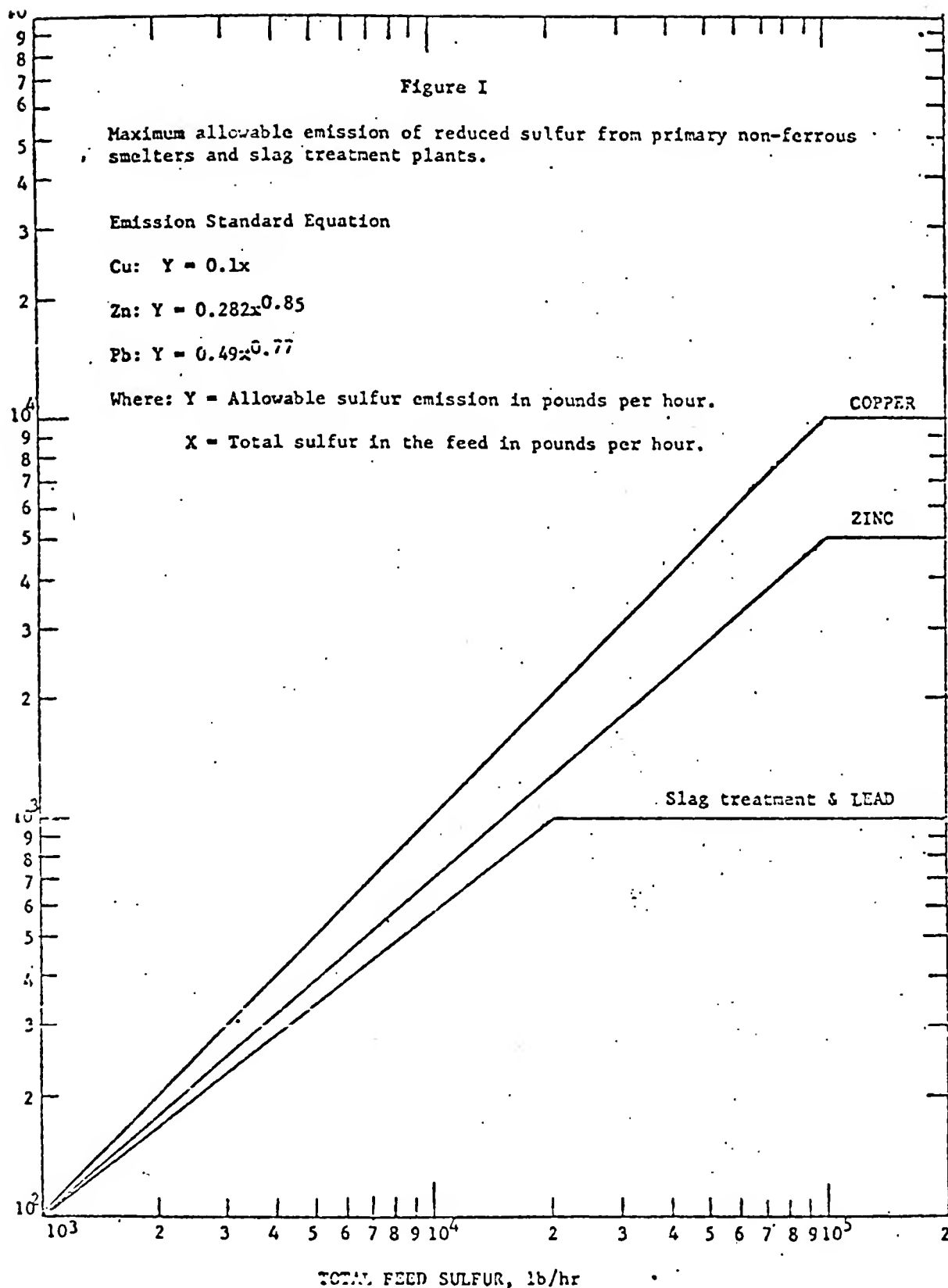
(ae) Other emission data as specified in the approved monitoring program.

(vii) Each Kraft mill shall furnish, upon request of the director, such other pertinent data as may be required to evaluate the mill's emission control program. Each mill shall immediately report abnormal mill operations which result in increased emissions of air contaminants, following procedures set forth in the approved monitoring program.

(d) All emission standards in Section (3) shall be based on average daily emissions. The limitations herein shall not preclude a requirement to install the highest and best practicable treatment and control available. New mills or mills expanding existing facilities may be required to meet more restrictive emission limits.

(e) Definitions:

"Continual monitoring" means sampling and analysis, in a continuous or timed sequence, using techniques which will adequately reflect actual emission levels or concentrations on a continuous basis.



16-2.14(1)-S1480 ODORS, CONTROL OF (1) No person shall cause, suffer, or allow any emissions of gases, vapors, or odors beyond his property line in such manner as to create a public nuisance.

(2) A person operating any business or using any machine, equipment, device or facility or process which discharges into the outdoor air any odorous matter or vapors, gases, dusts, or any combination thereof which create odors, shall provide, properly install, and maintain in good working order and in operation such odor control devices or procedures as may be specified by the administrator.

No person shall operate any business or use any such machine, equipment, device or facility in such manner as to create a public nuisance.

(3) Odor producing materials shall be so stored and handled that odors produced thereby do not create a public nuisance. No person shall accumulate such quantities of such materials as to permit spillage or other escape.

Odor bearing gases, vapors, fumes, or dusts arising from materials in process shall be so confined at the point of origin as to prevent liberation of odorous matter. Confined gases, vapors, fumes, or dusts shall be treated before discharge to the atmosphere as required in Section (2).

(4) Whenever dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape so as to cause a public nuisance, the administrator may order that a building or buildings in which processing, handling, and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne materials leaving the building are treated by incineration or other effective means for removal or destruction of odorous matter or other contaminants before discharge into the open air.

(5) No person shall operate or use any machine, equipment, device or facility for the reduction of animal matter unless all gases, vapors, and gas-entrained effluents from such facility are incinerated at a temperature of not less than 1200° Fahrenheit for a period of not less than 0.3 seconds, or processed in such manner as determined by the administrator to be equally or more effective for the purpose of air pollution control.

A person incinerating or processing gases, vapors, or gas-entrained effluents pursuant to this rule shall provide, properly install and maintain in good working order and in operation, devices as specified by the administrator for indicating temperatures, pressure or other operating conditions. (History: Sec. 69-3913, R.C.M. 1947; Order MAC 16-1; Adp. 12/31/72; Eff. 12/31/72; AMD, MAC Not. No. 16-2-50; Order MAC No. 16-2-23, Adp. 7/18/75; Eff. 9/5/75.)

16-2.14(1)-S1490 OPEN BURNING RESTRICTIONS (1) Except as specified in subsection (2), no person shall cause, suffer or allow an open outdoor fire unless an air quality permit has been obtained, and further provided that the fire authority for the area of the burn shall be notified of intent to burn giving location, time and material to be burned and that proper fire safety directions given by the fire authority be complied with. A burning permit is required from the responsible fire control agency during the closed or extended fire season (May 1 - September 30 or as extended pursuant to Section 28-103 and 28-603, R.C.M. 1947). Reasonable precautions shall be taken to keep the area of the burn within the confines for which the permit was given. Reasonable measures shall be taken to eliminate smoke when the purpose for which the fire was set has been accomplished. A permit shall be allowed only under the following conditions:

(a) When such fire is set or permission for such fire is given in the performance of the official duty of the responsible fire control officer;

(i) for the purpose of the elimination of a fire hazard which cannot be eliminated by any other means;

(ii) for instruction in methods of fighting fires, provided the material burned shall not be allowed to smolder after the initial burn has been completed. Facilities to put the fire completely out shall be on hand and used by the responsible fire control officer until all smoldering has ceased. The responsible fire control officer shall not leave the scene of the burn until all smoking debris has been clearly extinguished and no smoking or smoldering occurs.

(b) When such fire is set in the course of an essential agricultural operation in the growing of crops or in the course of accepted forestry practices, provided no public nuisance is created.

(c) When fires are set for a clearing of land for new roads, power lines, subdivisions, dams and other similar projects and no public nuisance is created.

(d) When materials to be burned originate on an individual's premises, excluding commercial, industrial and institutional establishments, where no provision is available by private hauler providing a public service or a tax supported service for collection of the material to be burned and no public nuisance is created.

(2) An air quality permit is not required under the following conditions:

(a) When small fires are used for outdoor cooking and other recreational purposes and no public nuisance is created.

(b) When salamanders or other devices are used for heating by construction or other workers and no public nuisance is created and provided no tires, or oily rags, or other materials producing dense smoke are burned.

(c) When in a county without a local air pollution control program pursuant to Section 69-3919, R.C.M. 1947, an open burning control officer designated by the county commissioners of any county publicly announces that, on a given day and time approved by the department, open burning will be permitted without an air quality permit. All other provisions of the open burning rule shall remain in effect.

(3) For purposes of essential agricultural or forestry burning:

(a) Reasonable precautions shall be taken to initiate and complete all burning under this rule during periods of good ventilation.

(b) Materials to be burned should be in a dirt-free condition.

The department will issue emergency open burning permits for disposing of oil from oil field sludge pits under this section if the above procedures are met. After July 1, 1980, such burning will be prohibited. Owners and operators of oil fields with sludge pits shall submit to the department by January 1, 1979, a plan which provides for their disposing of oil wastes from sludge pits by alternative methods other than burning not later than July 1, 1980. (History: Sec. 69-3909, 69-3913, R.C.M. 1947; Eff. 12/31/72; AMD, 1977 MAR p.258; Eff. 8/26/77; AMD, 1978 MAR p. 318; Eff. 8/11/78.)

16-2.14(1)-S14000 MALFUNCTION OF AN INSTALLATION

(1) When a malfunction in any installation occurs that can be expected to increase the emissions and to continue for a period greater than four hours, the person shall notify the administrator or his designated representative by telephone promptly or at the beginning of the next working day after the malfunction. On receipt of this notification, if the condition still persists, the administrator or his designated representative may permit the continuance of the operation for a period not to exceed ten days provided that written application is made to the administrator. Such application shall be made within 24 hours of the malfunction or within such other time period as the administrator or his designated representative may specify. In cases of major equipment failure, additional time may be granted by the administrator, provided a corrective program has been submitted by the person and approved by the administrator and provided there is no threat to life, health or property.

(2) For all malfunctions the duration of which are four hours or more, the administrator may require each owner or operator to file, within seven days, a written report with the administrator. The report shall include the date, time of commencement, and completion of each time period of excess emissions due to startup, shutdown, malfunction, or other cause. The report shall include the nature and cause of any such malfunction, corrective actions taken, and preventive measures adopted.

(3) Emissions in excess of the applicable standards resulting from a malfunction shall be considered violations unless the requirements of subsection (1) and (2) of this rule have been met. (History: Sec. 69-3913, R.C.M. 1947; Order MAC No. 16-1; Adp. 12/31/72; Eff. 12/31/72; AMD, MAC Not. No. 16-2-59; Order MAC No. 16-2-23; Adp. 7/18/75; Eff. 9/5/75.)

16-2.14(1)-S14010 CIRCUMVENTION (1) No person shall cause or permit the installation or use of any device of any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation.

(2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created. (History: Sec. 75-2-203, MCA; Eff. 12/31/72.)

16-2.14(1)-S14020 MOTOR VEHICLES, CONTROL OF POLLUTION

(1) No person shall intentionally remove, alter or otherwise render inoperative, exhaust emission control, crank case ventilation or any other air pollution control device which has been installed as a requirement of federal law or regulation.

(2) No person shall operate a motor vehicle originally equipped with air pollution control devices as required by federal law or regulation unless such devices are in place and in operating condition. (History: Sec. 75-2-203, MCA; Eff. 12/31/72.)

16-2.14(1)-S14030 WOOD WASTE BURNERS (1) Construction, reconstruction, or substantial alteration of wood-waste burners is prohibited unless the requirements of the permit rule, ARM 16-2.14(1)-S1415 have been met.

(2) No person shall cause or authorize to be discharged into the outdoor atmosphere from any wood-waste burner any emissions which exhibit an opacity of twenty percent (20%) or greater averaged over six (6) consecutive minutes.

(3) No person shall cause or authorize to be discharged into the outdoor atmosphere from any wood-waste burner particulate matter in excess of 0.1 grains per standard cubic foot corrected to twelve percent (12%) CO₂.

(4) A thermocouple and a recording pyrometer or other temperature measurement and recording device approved by the department shall be installed and maintained on each wood-waste burner. The thermocouple shall be installed at a location six (6) inches above and near the center of the horizontal screen or at another location approved by the department.

(5) A daily written log of the wood-waste burner's operation shall be maintained by the owner or operator to determine optimum patterns of operations for various fuel and atmospheric conditions. The log shall include, but not be limited to, the time of day, draft settings, exit gas temperature, type of fuel, and atmospheric conditions. The log or a copy of it shall be submitted to the department within ten (10) days after it is requested.

(6) No person shall use a wood-waste burner for the burning of other than production process wood-waste transported to the burner by continuous flow conveying methods.

(7) Rubber products, asphaltic materials, or materials which cause dense smoke discharge shall not be burned or disposed of in wood-waste burners.

(8) Exception: For building of fires in wood-waste burners, the provisions of section (2) and (3) of this rule may be exceeded for not more than sixty (60) minutes in eight (8) hours. (History. Sec. 75-2-203, MCA; Eff. 12/31/72; AMD, 1978 MAR p. 1732; Eff. 12/29/79.)

16-2.14(1)-SI4040 AMBIENT AIR QUALITY STANDARDS

(1) In accordance with Section 75-2-202, MCA of the Clean Air Act of Montana, on May 7, 1967, the board adopted the Ambient Air Quality Standards shown below.

(2) Until additional pertinent information becomes available with respect to the effects of the substances listed below, the following air quality criteria shall apply in Montana.

<u>Pollutants</u>	<u>Standards</u> (Maximum permissible concentrations)
Sulfur dioxide ^a	0.02 ppm, maximum annual average 0.10 ppm, 24-hour average, not to be exceeded over 1 percent of the days in any 3-month period 0.25 ppm not to be exceeded for more than one hour in any 4 consecutive days.
Reactive sulfur (sulfation) ^b	0.25 milligrams sulfur trioxide per 100 square centimeters per day, maximum annual average 0.50 milligram sulfur trioxide per 100 square centimeters per day, maximum for any 1-month period
Suspended sulfate ^c	4 micrograms per cubic meter of air, maximum allowable annual average 12 micrograms per cubic meter of air, not to be exceeded over 1 percent of the time
Sulfuric acid mist ^d	4 micrograms per cubic meter of air, maximum allowable annual average 12 micrograms per cubic meter of air, not to be exceeded over 1 percent of the time 30 micrograms per cubic meter of air, hourly average, not to be exceeded over 1 percent of the time
Hydrogen sulfide ^e	0.03 ppm, $\frac{1}{2}$ -hour average, not to be exceeded more than twice in any 5 consecutive days 0.05 ppm, $\frac{1}{2}$ -hour average, not to be exceeded over twice a year

k. Forage cut, dried, ashed and subjected to Winter-Willard distillation procedure (SPADNS color).

1. Gaseous fluorides measured by calcium formate paper technique in board standard shelter - Winter-Willard distillation procedure (SPADNS color).

The ambient air quality standards listed describe a level of air quality designed to protect people from the adverse effects of air pollution; and they are intended further to promote maximum comfort and enjoyment in use of property consistent with economic and social well-being of the community.

Ambient air quality standards are used as a tool in achieving cleaner air, not as a license to permit unnecessary degradation of air quality which would thwart attainment of the long-range goal to maintain a reasonable degree of air purity.

These standards are not intended to represent the ultimate in air quality achievement. It is anticipated that research and development will gradually make possible cleaner air at lower cost. As evidence accumulates on deleterious effect of the contaminant, present objectives will be revised or additional standards established. The standards are designed to protect the health, welfare and comfort of the public and to minimize economic losses.

Because some pollutants combine chemically to form more harmful materials than the original emissions, ascribing a single effect to a single pollutant would be an erroneous over-simplification. The standards, therefore, apply to air containing a variety of pollutants. Although reaching the goals will result in benefits, no allowance for the time needed to achieve them was considered in their selection. They are intended to apply to areas where people live or where an adverse effect may occur.

The board, in adopting these standards, intends them to be goals and guidelines and so interprets the legislative intent of the word "standards" in Section 69-3909, R.C.M. 1947, of the Clean Air Act of Montana.

(3) The sampling and analytical procedures employed to measure ambient levels of contaminants are to be consistent with obtaining accurate results which are representative of the conditions being evaluated. The sampling and analytical techniques enumerated may be used directly or employed as reference standards against which other methods may be calibrated. (History: Sec. 69-3909, R.C.M. 1947; Fff. 12/31/72.)

16-2.14(1)-S14041 PROCEDURES FOR HEARINGS ON PROPOSED AMBIENT AIR QUALITY STANDARDS The following procedures shall be followed with respect to the hearings before the Board of Health and Environmental Sciences and its presiding officer for the establishment of ambient air quality standards in the State of Montana:

(1) The testimony of interested parties shall be prefiled within thirty (30) days after the date of mailing of the final environmental impact statement, with copies going to all parties on the service list. Thereafter, within forty-nine (49) days all responses thereto shall be prefiled with the Board or its presiding officer. The prefiling of direct testimony and response testimony applies to both expert witnesses and policy witnesses, if any.

The opening statements of the direct testimony or responses thereto must contain a description of the witnesses' qualifications. The description of qualifications shall include but not be limited to the following:

- (a) Educational background and experience;
- (b) Description of any post-graduate training and professional career since graduation;
- (c) Identification of pertinent publications authored by the witness; and;

- (d) A disclosure of group representation, if any.

(2) Rebuttal statements to responses, to opening statements and to any testimony presented by the parties or expert witnesses at public hearing must be filed within forty-five (45) days after the date upon which the public hearings are closed.

(3) All statements must be made under oath.

(4) Cross-examination shall not be permitted except by the presiding officer or any Board member.

(5) Witnesses and parties with prefiled opening statements or responses shall be subject to the call of the presiding officer or the Board to attend any public hearing for questioning by the presiding officer or Board members.

(6) A schedule for the appearance of any such witness will be prepared by the presiding officer or the Board which will identify each witness and the party that he represents; and the date upon which said witness is expected to appear for questioning. Copies of such schedule will be provided all names of the service list.

(7) Even though all expert witnesses are required to prefile their statements and/or responses to opening statements, it shall not be a requirement that a party or expert witness shall have filed opening statements in order to file a response to opening statements. All parties or expert witnesses who have filed opening statements or responses to opening statements shall be entitled to file rebuttal statements as hereinabove provided.

(8) Rules of discovery shall not be applicable to these proceedings. Discovery among the parties or expert witnesses shall not be permitted. The order of contaminant or pollutant will be addressed at the public hearings as follows: Sulfur dioxide (SO₂), total suspended particulates (TSP), fluorides (FL), urban pollutants, heavy metals and hydrogen sulfide (H₂S).

16-2.14(1)-S14050 TESTING REQUIRED, FACILITIES

(1) Any person or persons responsible for the emission of air contaminants into the outdoor atmosphere shall upon written request of the director provide the facilities and necessary equipment including instruments and sensing devices and shall conduct tests using methods approved by the director. Such tests shall include, but not be limited to, a determination of the nature, extent, quantity and degree of air contaminants which are or may be emitted as a result of such operation at all sampling points designated by the director and the data shall be recorded in a permanent log at least once each hour, if applicable. These data shall be maintained for a period of not less than one year and shall be available for review by the department. Such testing and sampling facilities may be either permanent or temporary at the discretion of the person responsible for their provision, and shall conform to all applicable laws and regulations concerning safe construction or safe practice. (History: Sec. 69-3913, R.C.M. 1947; Order MAC 16-1; Adp. 12/31/72; Eff. 12/31/72.)

16-2.14(1)-S14060 FLUORIDE EMISSIONS, RESTRICTIONS

(1) No person shall cause, suffer, allow or permit to be discharged into the outdoor atmosphere from any phosphate rock or phosphorite processing equipment or equipment used in the production of elemental phosphorous, enriched phosphates, phosphoric acid, defluorinated phosphates, phosphate fertilizers or phosphate concentrates or any equipment used in the processing of fluorides enriched wastewater fluorides in a gaseous or particulate form or any combination of gaseous or particulate forms in excess of 0.3 pounds per ton of P_2O_5 (phosphorous pentoxide) introduced into the process of any calcining, nodulizing, defluorinating or acidulating process or any combination of the foregoing, or any other process, except aluminum reduction, capable of causing a release of fluorides in the form or forms indicated in this section.

(2) Pond Emissions:

(a) No person or persons shall cause, suffer, allow or permit to be released into the outdoor atmosphere from any storage pond, settling basin, ditch, liquid holding tank or other liquid holding or conveying device from operations outlined in Section (1) fluorides in excess of 108 micrograms per square centimeter per 28 days ($ug/cm^2/28$ days) using the calcium formate paper method. Papers shall be exposed in a standard Montana Box located not less than 18 inches or more than 48 inches above the level of the liquid in the devices herein enumerated and not more than 16 inches laterally from the liquid's edge. Other locations may be permitted if approved by the director.

(b) Not less than four such sampling stations shall be placed at locations designated by the director. Two or more calcium formate papers, as designated by the director, shall be exposed in the standard Montana Box for a period designated by the director. Regardless of the duration of the sampling period, the values determined shall be corrected to 28 days.

(c) A minimum of two calcium formate papers for each sampling period from each sample box shall be provided the director if requested and within ten days from the date of request.

(3) Preparation, Exposure and Analysis:

(a) Preparation of calcium formate papers:

(i) Soak Whatman #2, 11 cm. filter papers in a 10 percent solution of calcium formate for five minutes.

(ii) Dry in a forced air oven at 80° C. Remove immediately when dryness is reached.

(b) Exposure of calcium formate papers:

(i) Two papers, or more, if directed, are suspended in a standard Montana Box on separate hangers at least two inches apart.

(ii) Exposure shall be for 28 days \pm 3 days unless otherwise indicated by the director.

(iii) Calcium formate papers shall be kept in an airtight container both before and after exposure until the time of analysis.

(c) Analysis of calcium formate papers is adapted from Standard Methods for the Examination of Water and Waste Water; using Willard-Winter perchloric acid distillations and Spadns-Zirconium Lake method for fluoride determination. (History: Sec. 69-3913, R.C.M. 1947; Order MAC 16-1; Adp. 12/31/72; Eff. 12/31/72.)

16-2.14(1)-S14070 PETROLEUM PRODUCTS, EXISTING STORAGE

(1) No person shall place, store or hold in any stationary tank, reservoir or other container of more than 65,000 gallons capacity any crude oil, gasoline or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressures sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with one of the following vapor loss control devices, properly installed, in good working order and in operation:

(a) A floating roof, consisting of a pontoon type or double-deck type roof, resting on the surface of the liquid contents and equipped with a closure seal, or seals to close space between the roof edge and tank wall. The control equipment provided for in this paragraph shall not be used if the gasoline or petroleum distillate has a vapor pressure of 13.0 pounds per square inch absolute or greater under actual storage conditions. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(b) A vapor recovery system, consisting of a vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing such hydrocarbon vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gas-tight except when gauging or sampling is taking place.

(c) Other equipment of equal efficiency provided such equipment has been approved by the administrator.

(2) No person shall use any compartment of any single or multiple compartment oil-effluent water separator which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with one of the following vapor loss control devices, constructed so as to prevent any emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.

(a) A solid cover with all openings sealed and totally enclosing the liquid contents. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(b) A floating roof, consisting of a pontoon type or double-deck type roof, resting on the surface of the liquid contents and equipped with a closure seal, or seals, to close the space between the roof edge and containment wall. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(c) A vapor recovery system, consisting of a vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing such hydrocarbon vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging

EMISSIONS (1) No person or persons shall cause, suffer, allow or permit to be discharged into the outdoor atmosphere from any primary aluminum reduction plant, aluminum smelter or aluminum manufacturing plant either in a gaseous or particulate form fluorides in excess of 0.060 pounds per hour per reduction cell commonly called a "pot". For operations producing aluminum at an annual rate of more than 200,000 tons, the combined emission of fluorides into the outdoor atmosphere from all pots regardless of the number shall not exceed 40.0 pounds per hour.

(2) Unless the gaseous portion of the fluorides emitted at any fluorides emission point is more than 50% of the total fluorides emitted, the results of sampling may be reported on a total fluoride basis. Sampling under such circumstances may be done without differentiation between gaseous and particulate phases of the emissions but all emitted fluorides must be collected as completely as possible.

Each existing plant to which this rule applies shall submit to the administrator a detailed monitoring program including, but not limited to, the following:

(a) A description of monitoring equipment and procedures capable of determining compliance with this rule.

(b) A description of the sources to be monitored which shall include the stack of any fluoride scrubber or any fluoride or particulate emission control device or emission point at the pots or pot rooms.

(i) Unless otherwise authorized by the administrator, data for each calendar month shall be reported by each plant not later than fifteen days after the end of each calendar month.

(ii) The data submitted must include the average daily emission of fluorides, as total fluorides, expressed in pounds per hour per operating pot. A pot must operate at least 75% of the time during the reporting period to qualify as an operating pot.

(iii) The number of pots operating during the reporting period must be reported.

(c) Within thirty days after approval of the detailed monitoring program by the administrator, the approved equipment shall be ordered by the plant. Within thirty days after receipt of the approved equipment from the vendor, the equipment shall be installed and operating. Reporting of the results shall begin as provided for in Section (2) at the end of the calendar month in which the monitoring equipment is installed and each month thereafter as indicated.

Each plant shall furnish, upon request of the administrator, such other pertinent data as may be required to evaluate the plant's emission control program.

(3) No person or persons shall cause, suffer, allow or permit to be discharged into the outdoor atmosphere from any primary aluminum reduction plant emissions of particulate matter in excess of 0.33 pounds per hour per reduction cell, or 9.4 pounds per ton of aluminum produced per 24 hours, whichever is the lesser.

(4) No owner or operator of any primary aluminum reduction plant or aluminum smelter subject to the provisions of Section (3) of this rule shall operate such facility unless all particulate matter emitted from such facility is collected by an exhaust gas system and treated in such manner as to comply with Section (3) of this rule prior to venting to the atmosphere. The height of emissions release shall reflect good engineering practices.

16-2.14(1)-S14082 STANDARD OF PERFORMANCE FOR NEW STATIONARY SOURCES

(1) This rule shall apply to the following new stationary sources: fossil fuel-fired steam generators, incinerators, portland cement plants, nitric acid plants, sulfuric acid plants, asphalt concrete plants, petroleum refineries, storage vessels for petroleum liquids, secondary lead smelters, secondary brass and bronze ingot production plants, iron and steel plants, sewage treatment plants, primary copper smelters, primary lead smelters, primary zinc smelters, primary aluminum reduction plants, wet process phosphoric acid plants, superphosphoric acid plants, diammonium phosphate plants, triple superphosphate plants, granular triple superphosphate storage facilities, coal preparation plants, ferroalloy production facilities, steel plant electric arc furnaces, kraft pulp mills, and lime manufacturing plants as defined in section (2) of this rule.

(2) All new stationary sources shall comply with the provisions of Title 40, Part 60, Code of Federal Regulations, July 1, 1977, as amended at 42 FR 37000, July 19, 1977, 42 FR 37936-37938, July 25, 1977, 42 FR 38178, July 27, 1977, 42 FR 39389, August 4, 1977, 42 FR 41122, August 15, 1977, 42 FR 41424, August 17, 1977, 42 FR 41754-41789, August 18, 1977, 42 FR 44812, September 7, 1977, 42 FR 55796-55797, October 18, 1977, 42 FR 57125-57126, November 1, 1977, 42 FR 58520-58521, November 10, 1977, 42 FR 61537, December 5, 1977, 43 FR 1494-1498, January 10, 1978, 43 FR 7568-7596, February 23, 1978, 43 FR 8799-8800, March 3, 1978, 43 FR 9276-9278 and 9452-9454, March 7, 1978, 43 FR 10866-10873, March 15, 1978, 43 FR 11984-11986, March 23, 1978, and 43 FR 15600-15602, April 13, 1978, with the following exceptions: 40 CFR 60.10 and 40 CFR 60.20-60.29 are deleted. Copies of the federal regulations are available at the air quality bureau of the department, Cogswell Building, Helena, Montana, phone: (406) 449-3454. (History: Sec. 75-2-203, MCA; NEW, Eff. 9/5/75; AMD, Eff. 9/5/76; AMD, 1978 MAR p. 1621; Eff. 12/15/78.)

16-2.14(1)-S14084 EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

(1) This rule shall apply to the owner or operator of any stationary source for which an emission standard for hazardous air pollutants is prescribed by section (2) of this rule.

(2) The owner or operator of any stationary source shall comply with the provisions of Title 40, Part 61, Code of Federal Regulations, July 1, 1977, as amended at 42 FR 41424, August 17, 1977, 42 FR 51574, September 29, 1977, 43 FR 8800, March 3, 1978, and 43 FR 26373-26374, June 19, 1978, with the following exception: 40 CFR 61.16 is deleted.

(3) A listing of affected stationary sources as defined in 40 CFT 61 shall be maintained by and available from the air quality bureau of the department. Copies of the Federal regulations are also available from the air quality bureau of the department, Cogswell Building, Helena, Montana, phone: (406) 449-3454. (History: Sec. 75-2-203, MCA; NEW, Eff. 9/5/76; AMD, 1978 MAR p. 1621, Eff. 12/15/78.)

16-2.14(1)-S14086 STACK HEIGHTS AND DISPERSION TECHNIQUES (1) Any source whose stack emissions are controlled in order to attain and maintain any national ambient air quality standard or to prevent significant deterioration of the air quality shall accomplish such control through emission limitation alone. The degree of emission limitation so required of any source for control of any air contaminant shall not be affected by so much of that source's stack height that exceeds good engineering practice or by any other dispersion technique, except as provided in section (3) of this rule.

(2) For purposes of this rule, the following definitions apply:

(a) "Stack" means any point in a source, designed to emit solids, liquids, or gases into the air, including a pipe, duct, or flare.

(b) "In existence" means that the stack is physically complete.

(c) "Dispersion technique" means any method which is intended to affect the concentration of an air contaminant in the ambient air by

(i) use of that portion of a stack which exceeds good engineering practice stack height,

(ii) varying the rate of emission of an air contaminant according to atmospheric conditions or ambient concentrations of that air contaminant, or

(iii) the manipulation of source process parameters or selective handling of exhaust gas streams. The preceding sentence does not include the reheating of a gas stream following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream.

(d) "Good engineering practice stack height" means that stack height necessary to ensure that emissions from the stack do not result in excessive concentrations of any air contaminant in the immediate vicinity of the source as a result of atmospheric downwash, eddies, and wakes which may be created by the source itself, nearby structures or nearby terrain obstacles and shall not exceed as appropriate:

(i) 30 meters, for stacks uninfluenced by structures or terrain;

(ii) $H_G = H + 1.5 L$

Where H = height of structure or nearby structure

L = lesser dimension (height or width) of the structure or nearby structure; for stacks influenced by structures;

(iii) such height as an owner or operator of a source demonstrates is necessary through the use of field studies or fluid models after notice and opportunity for public hearing.

(e) "Excessive concentrations" for the purpose of determining good engineering practice stack heights in fluid modeling studies means a maximum concentration of any air contaminant in excess of an ambient air quality standard, due in part or whole to downwash, wakes or eddies which is at least 40 percent in excess of the maximum concentration of any air contaminant experienced in the absence of downwash, wakes or eddy effects produced by nearby structures or terrain.

(3) This rule shall not apply to stack heights in existence, or dispersion techniques implemented, prior to December 31, 1970, or to non-ferrous smelters operating under non-ferrous smelter orders obtained pursuant to section 119 of the Federal Clean Air Act as amended on August 7, 1977. (History: Sec. 75-2-111, 75-2-203, MCA; NEW, 1978 MAR p. 1729; Eff. 12/29/78.)

